

Application No. 10/673351  
Amendment dated February 23, 2006  
Reply to Office Action of December 19, 2005

Docket No.: 84517US1

**AMENDMENTS TO THE CLAIMS**

1-10. (Canceled)

11. (New) A device comprising:

    a PDMS body having a fluid pathway arranged to permit flow of a fluid in a first direction therethrough; and

    a light input part arranged to accept input light and permit the input light to travel into said PDMS body and through said fluid pathway in a second direction opposite of the first direction.

12. (New) The device of claim 11, further comprising a light manipulating part operable to manipulate the input light to travel through a specific portion of said fluid pathway.

13. (New) A device comprising:

    a body comprising a first material and having a fluid pathway arranged to permit flow of a fluid in a first direction therethrough; and

    a light input part on said body and comprising a second material, said light input part being arranged to accept input light and permit the input light to travel into said body and through said fluid pathway in a second direction opposite of the first direction,

    wherein said first material is different from said second material.

14. (New) The device of claim 13, wherein said body comprises PDMS.

15. (New) The device of claim 13, wherein said light input part comprises glass.

16. (New) The device of claim 13, further comprising a light manipulating part operable to manipulate the input light to travel through a specific portion of said fluid pathway.

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17. (New) A system comprising:

a light source operable to emit light; and

a PDMS body having a fluid pathway arranged to permit flow of a fluid in a first direction therethrough,

wherein said body is arranged to accept the light and permit the light to travel into said PDMS body and through said fluid pathway in a second direction opposite of the first direction.

18. (New) The device of claim 17, further comprising a light manipulating part operable to manipulate the input light to travel through a specific portion of said fluid pathway.